ABSTRACT

Extruded tantalum billets and niobium billets are described having a substantially uniform grain size and preferably an average grain size of about 150 microns or less and more preferably an average grain size of about 100 microns or less. The extruded billet can then be forged or processed by other conventional techniques to form end use products such as sputtering targets. A process for making the extruded tantalum billets or niobium billets is also described and involves extruding a starting billet at a sufficient temperature and for a sufficient time to at least partially recrystallize the billet and form the extruded billet of the present invention.